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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/927,295	08/10/2001	Scott E. Moore	500199.02	7399

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EXAMINER

OJINI, EZIAMARA ANTHONY

ART UNIT	PAPER NUMBER
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3723

DATE MAILED: 02/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/927,295

Applicant(s)

MOORE, SCOTT E.

Examiner

Anthony Ojini

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 35-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 35-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2,4,5</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Applicant's cancellation of claims 1-34 and 44-76 in Paper No. 3 is acknowledged.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 35-43 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In claim 35, line 4, the expression "**a cartridge frame comprising a linear member**" was not described in the specification. In claim 40, line 6, the expression "**an elongated member coupling the supply roll and the take-up roll**" was not described in the specification.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 35,38,39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohno et al. (5,727,989) in view of Laurent (5,915,860).

With respect to claim 35, Ohno et al. disclose a polishing pad cartridge in an apparatus having a supply and take-up spindles spaced apart by first distance, the polishing pad cartridge comprising: a supply roll (33) and take-up roll (34) rotatably coupled to a frame (see figs 3,7); and an elongated polishing pad (2) having a first end attached to the supply roll and a second end attached to the take-up roll (see fig. 3).

Ohno et al. fail to disclose a cartridge frame comprising a linear member having a first attachment portion and second attachment portion spaced apart from the first attachment portion by a second distance wherein the second distance being approximately equal to the first distance between the supply spindle and the take-up spindle.

Laurent discloses a cartridge frame **comprising a linear member** having a first attachment portion and second attachment portion spaced apart from the first attachment portion by a second distance wherein the second distance being approximately equal to the first distance between the supply spindle and the take-up spindle (see figs. 8,9).

It would have been obvious to one having ordinary skill in the art the time the invention was made to provide apparatus of Ohno et al. with a cartridge frame having a first attachment portion and second attachment portion spaced apart from the first attachment portion by a second distance wherein the second distance being

approximately equal to the first distance between the supply spindle and the take-up spindle in view of Laurent so as to keep the two rollers in position and ensure the polishing tape is under tension.

With respect to claim 38, Ohno et al. fail to disclose the polishing tape includes polyurethane.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide apparatus of Ohno et al. with polishing tape that includes polyurethane, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability (e.g. resilient) for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416. See also *Ballas Liquidating Co. v. Allied industries of Kansas, Inc.* (DC Kans) 205 USPQ 331.

With respect to claim 39, Ohno et al. fail to disclose wherein the supply roll includes an axle having a portion extending beyond an edge of the polishing pad and the first attachment portion of the frame includes an opening sized to rotatably receive the portion of the axle.

Laurent discloses wherein the supply roll includes an axle having a portion extending beyond an edge of the polishing pad and the first attachment portion of the frame includes an opening sized to rotatably receive the portion of the axle (see fig. 8).

It would have been obvious to one having ordinary skill in the art the time the invention was made to provide apparatus of Ohno et al. with supply roll that includes an axle having a portion extending beyond an edge of the polishing pad and the first attachment portion of the frame includes an opening sized to rotatably receive the portion of the

axle in view of Laurent so as to keep the two rollers in position and ensure the polishing tape is under tension.

Claims 36,37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohno et al. (5,727,989) in view of Laurent (5,915,860) as applied to claim 35 above, and further in view of Tietz (6,135,859).

With respect to claim 36, Ohno et al. fail to disclose the polishing pad is a fixed abrasive polishing pad that includes a suspension medium and plurality of abrasive elements fixedly distributed in the suspension medium.

Tietz discloses a fixed abrasive polishing pad (110) that includes a suspension medium and plurality of abrasive elements fixedly distributed in the suspension medium (see col. 6, lines 1-8 & fig. 4).

It would have been obvious to one having ordinary skill in the art the time the invention was made to provide apparatus of Ohno et al. with a fixed abrasive polishing pad that includes a suspension medium and plurality of abrasive elements fixedly distributed in the suspension medium in view of Tietz so as to polish more substrates without replacing the pad.

With respect to claim 37, Ohno et al. disclose wherein the spindles have projections extending away therefrom and the supply roll (33) and take-up roll (34) having aperture for receiving the spindles (see fig. 7).

Claims 40 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohno et al. (5,727,989) in view of Kondo (5,865,545).

With respect to claim 40, Ohno et al. disclose a polishing pad cartridge in an apparatus having a supply and take-up spindles spaced apart by first distance, the polishing pad cartridge comprising: a supply roll (33) and take-up roll (34) having aperture for receiving the spindles (see fig7); **an elongated member coupling the supply roll and the take-up roll** (see fig.9); and an elongated polishing pad (2) having a first end attached to the supply roll and a second end attached to the take-up roll (see fig. 3), the elongated polishing pad (2) being at least partially coiled on the supply roll (see fig. 3).

Ohno et al. fail to disclose the take-up roll is being movable relative to the supply roll to separate the first and second apertures by a second distance approximately equal to the first distance while the polishing pad is attached to the supply roll and take-up roll.

Kondo discloses a cartridge device having a supply roll that is being movable relative to the take-up roll (see figs. 3-5) but fail to show a take-up roll that being movable relative to the supply roll.

It would have been obvious to one having ordinary skill in the art the time the invention was made to provide apparatus of Ohno et al. with a cartridge device having a supply roll that is being movable relative to the take-up roll in view of Kondo so as to replace worn out polishing tape with a new one.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide apparatus of Ohno et al. a cartridge device having a take-up roll that is being movable relative to the supply roll so as to ensure continuously

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reeling of the tape, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

With respect to claim 43, please refer to claim 38 above.

Claims 41,42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohno et al. (5,727,989) in view of Kondo (5,865,545) as applied to claim 40 above, and further in view of Tietz (6,135,859).

With respect to claim 41, please refer to claim 36 above.

With respect to claim 42, please refer to claim 37 above.

Response to Amendment

Applicant's arguments filed 1/26/04 have been fully considered but they are not persuasive.

Applicant argues that U.S. Patent No. 5,727,989 to Ohno et al. "does not include a linear member that extends between the supply roller 11 and the take-up 12 roller".

However, Laurent discloses a linear member that extends between supply roller and the take-up roller.

Applicant argues that U.S. Patent No. 5,915,860 to Laurent "does not or fairly suggest a linear member that extends between the rollers". However, Laurent discloses a linear member that extends between two rollers (84).

Applicant argues that U.S. Patent No. 6,135,859 to Tietz "fails to disclose or to fairly suggest the disclosure missing from the Ohno and Laurent; namely, a linear member that extends between the rollers". However, Tietz discloses the concept of a fixed

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abrasive polishing pad that includes a suspension medium and plurality of abrasive elements fixedly distributed in the suspension medium.

Applicant argues that U.S. Patent No. 5,865,545 to Kondo “does not disclose or suggest a linear member that extends between the spools”. However, **Kondo** discloses a concept of a cartridge device having a supply roll that is being movable relative to the take-up roll.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Ojini whose telephone number is 703 305 3768. The examiner can normally be reached on 7 to 4 Tuesday-Friday with every other Monday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hail can be reached on 703 308 2687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



AO
02/13/04

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